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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,376	05/09/2001	David W. Sherrer	ACT.011	3898

7590 10/01/2003

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EXAMINER

PATEL, TULSIDAS C

ART UNIT PAPER NUMBER

2839

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/851,376	Applicant(s) SHERRER, DAVID W.	
	Examiner T. C. Patel	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-20 and 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20, 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General Status

1. This is a Final Action on the Merits. Claims 1-6, 8-20, 22-42 are pending in the case.

Please note the CHANGE of EXAMINER.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 9-20 and 23-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherin et al. (US 4,142,776) in view of Woith (US 4,810,053).

Cherin et al. in figures 1-5, discloses an optical waveguide ferrule comprising a carrier tube 13 having a central axis, a waveguide carrier 11, 12 located within the carrier tube, an optical waveguide 33 extending through the waveguide carrier, the first carrier body 11, composed of substrate 51 and insert 53 (figure 5) made of silicon, having a first principle surface (top) and the second carrier body has a first principal surface, the first carrier body also has two parallel surfaces (top, bottom) and two non-parallel surfaces (side). However, Cherin et al. discloses grooves only in one surface of the first carrier body. Woith, discloses a ferrule with two carrier bodies 52, 54 and each having complimentary grooves 104, 106, to accommodate an optical waveguide. Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify the carrier bodies of Cherin et al. and provide grooves on the both the carrier bodies as taught by Woith, so that groove depth can be on each of the carrier body can be reduced.

For claims 2, 6, 16, 20, 30, 33, 36, 37, though Cherin et al. discloses only the insert made of silicon material, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the both the carrier bodies from silicon material and make them identical, so as to reduce the number of parts. For claims 3 and 17, use of adhesive to bond the carrier body is well known in the art so as to maintain relative position of the carrier bodies, For claims 4-6, Woith already discloses the axes of the tube and the optical guide to be coincident. For claims 10, 11, 24 and 25, Cherin et al. discloses the carrier bodies with trapezoidal and isosceles trapezoidal shapes.

For claims 12-14 and 26-28, the first and second carrier bodies have two parallel surfaces (top and bottom), two inclined or non-parallel surfaces and one of the top or bottom surface being longer than the other of the top and bottom surfaces and also, one of them forming principal surface for each of the carrier bodies.,

Official notice is taken that separating first and second carrier bodies into discrete chips by an etching process or a dicing saw is well known in the art of silicon chip etching and formation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use etching or a dicing saw to form the silicon chips disclosed by Cherin et al. The motivation being the consistent and reliable accuracy.

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4. Claims 8 and 22 are rejected under 35 U.S.C. 103(x) as being unpatentable over Cherin et al. in view of Woith as applied to claims 1-6, 9-20 and 23-42 above, and further in view of Cherin et al (US 4,142,776).

Cherin and Woith fail to disclose a waveguide carrier having a hexagonal cross-section. Providing a hexagonal shape for the carrier would be an obvious matter of design choice, since such a modification would have involved a mere change in the size or shape of a component. A change in size or shape is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

5. Applicant's arguments with respect to claims 1-6, 8-20, 22-42 has been considered but is moot in view of the new ground(s) of rejection.

The examiner has now changed to rejection and applied Cherin and Woith references to reject all the claims.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to

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37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Change of Address

7. Effective May 1, 2003, the United States Patent and Trademark Office has a new Commissioner for Patents address. Correspondence in patent-related matters to organizations reporting to the Commissioner for Patents must now be addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (703) 308-1736. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1736.



T. C. Patel
Primary Examiner
Art Unit 2839

tcp
September 29, 2003